

Instinct

Siberia, and the Alps of Europe, the veins above and below are strongly bordered with blackish, and the ground-color of the hind wings and the apex of the fore wings on the under side are distinctly bright yellow.

(e) Newfoundland variety *acadica*, Edwards, Plate XXXIV, Fig. 19, ?. This form is larger than the others, and in markings intermediate between *pallida* and *bryonice*. The under side in both sexes and the upper side in the female are distinctly yellowish.

Early Stages.—These are well known and have often been described, but some of the varietal forms need further study.

The species ranges from the Atlantic to the Pacific, and from Alaska to the northern limits of the Gulf States.

(7) *Pieris rapae*, Linnaeus, Plate XXXV, Fig. 3, ? ; Plate II, Figs. n, 12, *larva*; Plate V, Figs. 58, 65, *chrysalis* (The Cabbage-butterfly).

Butterfly.—This common species, which is a recent importation from Europe, scarcely needs any description. It is familiar to every one. The story of its introduction and the way in which it has spread over the continent has been well told by Dr. Scudder in the second volume of "The Butterflies of New England,"* p. 1175. The insect reached Quebec about 1860. How it came no man knows; perhaps in a lot of cabbages imported from abroad; maybe a fertile female was brought over as a stowaway. At all events, it came. Estimates show that a single female of this species might be the progenitor in a few generations of millions. In 1863 the butterfly was already common about Quebec, and was spreading rapidly. By the year 1881 it had spread over the eastern half of the continent, the advancing line of colonization reaching from Hudson Bay to southern Texas. In 1886 it reached Denver, as in 1884 it had reached the head waters of the Missouri, and it now possesses the cabbage-fields from the Atlantic to the Pacific, to the incalculable damage of all who provide the

raw material for
sauer-kraut. The injury annually done by the
caterpillar is esti-
mated to amount to hundreds of thousands of
dollars.

INSTINCT

Two city fathers were standing in the market-
place beside a
pile of cabbages. A naturalist, who was their
friend, came by.
As he approached, a cabbage-butterfly, fluttering
about the place.